

Application No.:09/851,510
Amendment dated: April 13, 2004
Reply to Office Action of 01/14/04

d.) Remarks

Claims 1-25 are pending in this application. Claim 8 has been amended in various particulars. New claims 19-25 have been added to alternatively define Applicants' invention.

Turning to the amendments, a number of grammatical errors were corrected in the specification. Further, proposed changes to Fig. 1 are presented in this amendment. Specifically, some reference numerals have been added to provide agreement with the specification.

Turning now to the merits, claims 1-18 were rejected under 35 U.S.C. § 102(e), as being anticipated by U.S. Pat. Appl. No. 20020126726 to Flanders, *et al.* and separately as being anticipated by U.S. Pat. Appl. No. 20020080504 to Atia. These rejections are respectfully traversed.

In the membrane systems described in the applied applications, the highly reflecting dielectric mirrors were deposited on the device layer. The device layer, however, was not removed along the optical axis.

In contrast, as illustrated in the instant application in for example Fig. 4, regions of the device layer 212 are removed on the backside of the mirror 230 to provide an optical port 314. Thus, when transmitted along the optical axis 10, the optical signal does not need to propagate through the full thickness of the device layer 212, if at all. This improves the performance by avoiding absorption, for example, in the device layer 212.

Now, referring to the instant claims, claim 1, for example, requires the combination of depositing an optical coating on the device layer, removing a sacrificial layer to form a release structure in the device layer, and forming a device layer port by removing a portion of the device layer in a region around the optical axis. In a similar vein, claim 12 is directed to a deflectable structure on a support that holds a first mirror structure. The deflectable mirror structure is located on an external side of the first mirror structure relative to the optical cavity. In new claim 19, a deflectable mirror

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structure on a support is provided that holds the first mirror structure. The deflectable mirror structure is released from the support structure by partial removal of a sacrificial layer. Theses deflectable mirror structures have an optical port in a region around the optical axis of the optical cavity.

This device layer port is not found in the applied references.

Thus, for the foregoing reasons, Applicants believe that the pending rejections are not supportable. Their withdrawal is requested.

Applicants believe that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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